ThyssenKrupp Steel and Stainless USA, LLC Project

Executive Summary of the Economic Impact and Cost/Benefit Analysis

May 22, 2007

Prepared by:
M. Keivan Deravi
&
Professor of Economics
School of Business
Auburn University Montgomery

Introduction

ThyssenKrupp Steel and Stainless USA, LLC is to develop a multi-billion manufacturing facility in Mt. Vernon, Mobile County, Alabama.

The facility's total employment is expected to reach a full employment level of 2,710 employees and production capacity is expected to reach 5.5 million metric tons annually from which 4.5 million metric tons will be carbon steel and 1 million metric tons will be stainless steel.

The plant will be used to primarily process slabs produced in the company's steel mill in Brazil. As a part of the company's global production strategy, the Alabama plant is expected to provide the company's operation in Mexico (ThyssenKrupp Mexinox) with its required pre-material production input.

In essence, the operation of the plant can be summarized as follows:

- 1. Importation of steel slabs
- 2. Transportation of the imported steel slabs to the plant site on barge via Mississippi River
- 3. Processing of the steel slabs
- 4. Transportation of the finished product via rail

Purpose and Assumptions

The purpose of this study of the Economic Impact of the ThyssenKrupp Steel and Stainless USA, LLC project:

- 1. To estimate the economic impact of a potential multi-billion investment on 2,700-worker steel processing plant in Mt. Vernon, Alabama
- 2. To analyze the benefits and costs associated with the project
- 3. To estimate the annual average rate of return from this project for the State of Alabama

In conducting this study it was necessary to make several assumptions. The assumptions we made are as follows:¹

1. Direct Investment by TK	\$3.7b
2. Direct Employment by TK	2700
3. Direct Payroll	\$113.6 million
4. Production Start Up Date	2010

2

¹ Primary data is provided by TK via Alabama Development Office.

Executive Summary of Results

1. Our conservative estimate of potential economic impact of the operation of TK investment is as follows (not including the construction phase):²

i.	Total employment impact	7000 jobs
ii.	Direct employment	2700 jobs
iii.	Indirect employment	4300 jobs
iv.	Total earnings	\$245.7m
v.	Direct earnings	\$113.6m
vi.	Indirect earnings	\$132.1m
vii.	Average annual earning for TK employee	\$41,900
viii.	Average annual earning for indirect employment	\$30,650

- 2. The total investment entails approximately \$1.8b spending in capital investment (machinery & equipment).
- 3. Construction payroll is estimated at \$1.0b and construction and building material expenditures is expected to reach \$0.9b.
- 4. While the majority of the capital expenditure spending is expected to be directed to out-of-state and global producers, a lion share of the construction spending is expected to occur within the close proximity of the proposed site.
- 5. The construction phase of the project is estimated to create up to 24,000 jobs over a three years period.
- 6. While the sheer magnitude of the demand for construction employment and material and the accelerated construction time line will test and challenge the existing labor pool and resources in the region it will, nevertheless, provide an immediate and substantial initial economic impetus on the region.
- 7. The annual operation of the plant will also create a substantial and immediate economic benefit for the state and the region.
- 8. It is our estimate that the plant will create a direct annual final demand (business expenditures directed toward the Alabama based businesses) of approximately \$430 million.
- 9. This direct annual increase in business expenditure is estimated to lead to a total annual impact of approximately of \$965 million on the state's economy.

3

² Primary data for construction phase and annual operation employment and payroll is obtained from TK commissioned reports which were made available to the author by the Alabama Development Office.

- 10. The cumulative value of the state and local revenue benefit over a period of 30 years can total to \$1.4b.
- 11. Non-abated education directed ad-valorem taxes from the plant, at the state and local government levels, is estimated to total to approximately \$218m over a period of 30 years.
- 12. The break-even point for the project is estimated to be 2020 for the state and local government cash (non-abated) investment.
- 13. Alternatively, the break-even point for the project is estimated to be 2030 for the state and local government total (cash and abated) investment.

NOTES

A large-scale economic development model was used to estimate information for the economic impact and cost/ benefit analysis of TK project. The model uses RIMS II economic multipliers from the U.S. Bureau of Economic Analysis. The multipliers are industry specific for Alabama and are used in conjunction with the local demographic and economic data to reflect the economy of the area in which the project is located. For the purpose of estimating the economic impact of this project demographic, economic and housing market information was compiled from:

The U.S. Department of Labor

The U.S. Census Bureau

The U.S. Bureau of Economic Analysis

The Alabama Department of Industrial Relations

The Alabama Department of Revenue

We made a number of **assumptions** that aided us in deriving the above estimates. First, we used 4.0 **percent as the effective average tax rate for the state corporate income tax**. Secondly, we assumed a **2.5 percent return on capital** as the average annual corporate taxable income. Thirdly, we assumed **40 percent of the required material for operation to be purchased from within the state** and the rest redirected to out of state entities. Finally, we assumed a **discount rate of 4 percent and a 30-year horizon** in order to compute the present value of the statutory and discretionary incentives. All of these assumptions are consistent with the standard practice and are in line with the assumptions used in previous industrial projects in the State.